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[54] **ELECTROPHORETIC DISPLAY PANEL WITH PLURAL ELECTRICALLY INDEPENDENT ANODE ELEMENTS**

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Related U.S. Application Data

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[52] **U.S. Cl.** **340/787**; 359/296

[58] **Field of Search** 340/787; 313/505, 584; 359/290, 291, 292, 293, 294, 295, 296, 297, 241

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[57] **ABSTRACT**

A triode-type electrophoretic display includes a fluid-tight envelope for containing an electrophoretic fluid with suspended pigment particles and has a glass viewing window upon which has been deposited a plurality of parallel cathode members. An electrically continuous grid member with a plurality of pores therein is deposited upon a layer of insulation overlying the cathode members. The grid pores preferably extend through the grid and the insulation layer to allow the fluid to contact the cathode members. A glass backplate seals the rear of the envelope and serves as a substrate for a plurality of parallel anode members. The cathode and anode members form a matrix with a plurality of intersections and are selectively electrically chargeable to induce movement of the particles within the fluid to or away from the individual intersections, localized concentrations of particles at the intersections being visible through the viewing window. The electrical connections between the cathode members and their associated display driver circuits reside in the plane of the faceplate surface upon which they are affixed. Similarly, the connections between anode members and anode driver circuits reside in the plane of the backplate surface upon which they are affixed.

19 Claims, 3 Drawing Sheets